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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/811,347

03/26/2004

Ray R. Eshraghi

4172-120

1569

23448

7590

06/14/2007

INTELLECTUAL PROPERTY / TECHNOLOGY LAW

PO BOX 14329

RESEARCH TRIANGLE PARK, NC 27709

EXAMINER

VARGOT, MATHIEU D

ART UNIT

PAPER NUMBER

1732

MAIL DATE

DELIVERY MODE

06/14/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/811,347	ESHRAGHI ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Mathieu D. Vargot	1732	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-68,71 and 76-87 is/are pending in the application.
- 4a) Of the above claim(s) 23-68,71,79 and 82-86 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22,76-78,80,81 and 87 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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1.Applicant's election without traverse of Species A in the reply filed on March 19, 2007 is acknowledged. Upon closer review of the claims deemed to be generic, it is clear that claim 79 actually belongs with Species C. This following action will be on claims 1-22 and 81—the elected species—and claims 76-78, 80, 81 and 87—the generic claims.

2.The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 76, 78 and 87 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Patent 10-266,015 (see Abstract).

The applied reference discloses the instant process of forming a polymeric hollow fiber by forming the precursor of a string of fibrous solid core (1) extrusion coated by a layer of polymeric membrane (2) and removing the solid core to form the fiber—see the Abstract.

3.The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-22, 77, 80 and 81 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent 10-266,015 in view of Hoffman et al (see col. 2, lines 4-20 and col. 3, lines 34-65).

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Japanese Patent –015 is applied for reasons of record, disclosing the basic claimed invention lacking essentially the aspect of using a removable substrate layer over the solid core fiber, the substrate layer being meltable and/or soluble to assist in removal. Hoffman et al is essentially applied for reasons of record to teach such a removable substrate material over which a polymeric membrane material is coated, the removable substrate material being removed to form the membrane fiber. Note that Hoffman et al discloses that hollow fibers would also be used to enhance the rate of removal of the substrate layer – see column 3, lines 34-35. In such a case, the hollow fiber would require a barrier material, which would naturally be a metal wire or fiber as shown in Japanese –015. In this regard, see also Hoffman et al, col. 3, lines 41-43. It would have been obvious to one of ordinary skill in this art to employ removable substrate materials as taught in Hoffman et al in the process of Japanese –015 in order to more accurately form the desired hollow fiber. The removal of a wire through the final fiber could possibly damage the fiber. However, using a removable substrate over the wire would clearly lessen any chance of harming the formed fiber. One of ordinary skill would have readily adapted the surface coating (see col. 3, lines 5-10) disclosed in Hoffman et al to the extrusion coating as taught in the primary reference. Hoffman et al teaches plastics and other materials for the removable substrate material (see col. 10, line 55 through col. 11, line 14) and the instant are submitted to be obvious thereover. The exact hollow fiber material used is also submitted to have been within the skill level of the art, as is the drying and curing temperatures employed.

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4. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

The 112 new matter rejection concerning the layers to be substantially circumferentially uniform has been dropped, since such is essentially shown in the instant figures.

However, it should also be noted that the reference that prompted applicant claiming this—ie, Ishikawa—is no longer being applied. At any rate, Japanese -015 is clearly a much better reference against the claims. In conjunction with Hoffman et al, it is respectfully submitted that the instant invention would have been obvious thereover. Applicant has provided many arguments as to why Hoffman et al would/could not be adapted to an extrusion process. However, it is respectfully submitted that the aspect of employing a removable substrate material over a wire core would have been readily adapted to continuous extrusion processing—such is commonly known as coextrusion, which has clearly been around for some time now.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mathieu D. Vargot whose telephone number is 571 272-1211. The examiner can normally be reached on Mon-Fri from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson, can be reached on 571 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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published applications may be obtained from either Private PAIR or Public PAIR.


Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

M. Vargot  
June 6, 2007

  
Mathieu D. Vargot  
Primary Examiner  
Art Unit 1732

6/6/07